

F. Technical Statement of Invention

G.

Item Number of Patent Correspondence Report	4
Technical Memo No. (If it is memo)	99050133
Reference No.	99P02416

H.

1. Title of the Invention

FFC Piercing Terminal 2

I.

2. Object of the Invention

To improve connection reliability and make pitch narrower of FFC piercing terminal.

J.

3. Explanation of and Problem in Prior Art (Examined Patent Publication Hei.11-144780)

Structure in which terminal claw portions pierce a FFC and are inverted in a direction to approach each other so as to make a connection.

Problem:

As shown in Fig. 2, sufficient conductor repulsive force cannot be obtained at a piercing portion.

As shown in Fig. 3, a contact area between a terminal and FFC conductor is broadened by piercing the FFC twice in order to attempt to improve reliability. However width (pitch) between terminals is large.

K.

4. Description of structure/effect of the Invention

Structure: In the terminal claw portion, a taper is formed in a direction to the center of the terminal, and a connection is held in a state that a conductor portion is curved after piercing.

Effect: When piercing the FFC conductor, by piercing and crimping it in a tight fitting manner, it is maintained that the conductor is curved in a cross sectional shape after piercing. Thereby, the connection load is large in comparison with the FFC conductor not curved and the connection reliability is improved.

L.

5. Description of Effect of the Invention

To improve connection reliability and make pitch narrower.

M.

6. Drawings

M1.

a. Prior Art (show a prior art most closed to the invention)

Fig.1

M2.

Fig.2

M3.

FFC conductor

M4.

Sufficient conductor repulsive force cannot be obtained

M5.

Fig. 3

M6.

FFC conductor

M7.

Large Pitch

M8.

b. Invention

M9.

Embodiment

M10.

Crimper

M11.

By forming a taper in an inside direction of the terminal, it is crimped while the FFC conductor is pierced in a tight fitting manner.

M12.

Narrow terminal width

M13.

By curving it, a connection load form the conductor is large.

M14.

a connection load large > small

(1) 従来其格を置いている特許公報・文獻など、または、本発明に関連する、
そのこと一を添付のこと、
(2) この説明書だけでは記載しきれない場合は、適当な用紙に記載し添付のこと、
(3) 発明の実施態様は多ければ多いほど良い、種別が取得できるので、全部記載のこと、
(4) 図面には番号を付し、説明にはその符号を用いること、

99050133
99P024

[illegible]